

AMENDMENTS TO THE CLAIMS:

Without prejudice, this listing of claims will replace all prior versions and listings of the claims in the present application:

LISTING OF CLAIMS:

- 1-6. (Cancelled).
7. (Currently Amended) An infrared source for a gas sensor comprising:
a first layer having first transmission characteristics; and
a second layer having second transmission characteristics,
wherein a combination of the first and the second transmission characteristics effects a bandpass filter characteristics for an operating frequency range, and
wherein the first and second transmission characteristics are based on absorption of infrared radiation.
8. (Previously Presented) The infrared source according to claim 7, wherein the first transmission characteristics with respect to the operating frequency range provides a higher transmission for shorter wavelengths, and the second transmission characteristics with respect to the operating frequency range provides a higher transmission for longer wavelengths.
9. (Previously Presented) The infrared source according to claim 7, wherein the first layer includes glass, and the second layer includes one of silicon and germanium.
10. (Currently Amended) A gas sensor comprising:
an infrared source;
a detector; and
an interference filter situated between the infrared source and the detector,
wherein the infrared source includes:
a first layer having first transmission characteristics, and
a second layer having second transmission characteristics,

wherein a combination of the first and the second transmission characteristics effects a bandpass filter characteristics for an operating frequency range, and
wherein the first and second transmission characteristics are based on absorption of infrared radiation.

11. (Previously Presented) The gas sensor according to claim 10, wherein the operating frequency range of the infrared source includes exactly one pass frequency of the interference filter.

12. (Previously Presented) The gas sensor according to claim 10, wherein the interference filter is a Fabry-Perot filter.